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THE LAST EXPLORATION OF LIEUTENANT MARQUES DE SOUZA: DIARY OF A JOURNEY ON THE ANANÁZ RIVER, BRAZIL*

PART II

The earlier instalment of the diary of Lieutenant de Souza, published in the preceding number of the Review, brings the narrative of his difficult journey down to the point where he begins to encounter the long series of falls and rapids that interrupt the Ananáz River midway in its course. His real difficulties now begin. Canoe after canoe is lost, the food supply at times gives out completely, and the Indians become a grave source of danger, finally attacking the party and killing Lieutenant de Souza and others. But for the lucky escape of one of the men who was absent on a hunting trip, the diary of Lieutenant de Souza and the manner of his death would have remained unknown.

DISASTERS AT THE "NINTH OF APRIL" FALL

April 10. At 6 o'clock we began to move the baggage around the fall on the right bank, just above the smaller fall and just below the large one. There is an abundance of *borrachudo* gnats, which attacked us without mercy. We used the Indian road to transport the canoes. These Indians, according to the information of the Nhambiquaras, are *cocorêo* (very wild) and call themselves Tchêlêpnindê. Everyone who has told us about these Indians has begged me to shoot them on the spot, if they should take hold of the rifle I always carry with me in my tent and should point it and say "pun-pun-pun." From this I concluded that they were very treacherous. At 5 o'clock in the afternoon there happened a thing that we had never expected. We went out in the small boat with the kitchen material in it, and behind it followed my boat from which I made the survey. I had taken three sights and was taking the fourth when Candido, who was in the small boat, warned us to look out as there was a fall. We soon saw him going down with João Peru, and in a moment the boat containing all the cooking utensils, two rifles, two battle axes, and three axes, was full of water. We hardly had time to turn our boat, for the current was tremendous. Thank God, though we continued going down stream, we succeeded in catching hold of limbs of trees and were able, with great difficulty, to stop the boat. At this landing we set up the camp. The two boats behind, which were bringing the supplies, stopped at our call and did not suffer any damage. After some moments poor Candido and João came

* Translated from the Portuguese and published in the *Geographical Review* at the request of the late Colonel Theodore Roosevelt.

along, the former with the sack all wet, and the latter with the oars and a kitchen pan also full of water, tired out by the struggle they had had in the midst of the rapids. We thus lost several essentials: two rifles, the kitchen utensils, three axes, two battle axes, many small kitchen utensils, and the boat. They told us that their boat had got jammed between two rocks and that, with effort, it might be released.

I am very sorry to have lost my best rifles and my tools, for now we have only one ax and four short swords to make boats with. By 7 o'clock at night we had transported to our camp all the baggage of the two boats that stayed behind.

April 11. Early in the morning we went to see if we could save that boat. Fortunately, after breaking our last rope and using our last resource, we succeeded in dragging it by a double cord to the bank of the river. Before this, however, Manguary and João, with great difficulty but with great courage, succeeded in catching hold of the other boats which had not yet capsized. Thank God, we got out the rifles that belonged to Candido, the three axes, and one short sword. We were very glad of this and soon began to transport the canoes around the fall. But, unfortunately, we lost the boat that I was using. Bernardino and Bahia, frightened by the danger which threatened them from the strong current, let go of the boat and succeeded in saving themselves. I soon became resigned to this misfortune and, as I was already tired, ordered breakfast and soon afterward requested Terto to look for a cashew tree, a *guanandy*, or some other timber that was suitable for a boat. The other men continued to open the path, for the Ninth of April Fall continued. At 12:30 I heard shots and was a little apprehensive but soon saw, by their continuation, that the men had found a colony of monkeys. A half hour afterward two men were bringing five enormous *barrigudos*. That was a *fiesta* day.

INCREASING ILLNESS AND MEAGER FOOD

April 12. Yesterday passed without any notable incident. Only I became a little worse, having vomited at night. We moved today to Camp No. 25, a spot above the last fall, which has an average height of two meters; at this place there is an *igarapé* on the left, six meters wide, and one on the right, ten meters wide. The first boat has already been transported. Tomorrow the other two will go, and we shall begin to make one for me. Thank God, I have been better today.

April 14. The men have transported the canoes to a place above the great fall, and my canoe is already dug out. Not until after we have finished it shall we transport it below the fall. I am very eager to continue the trip, for the men, besides being weak and working constantly in the sun and rain, are ill.

Today the number of sick men has increased; there are three: Victorino, Manguary, and Bahia. The last-named is completely prostrated. There

are moments in which, if I were weak-minded, I should lose courage. What gives me most care is the lack of food. In the other camp we killed some monkeys, but after that, nothing.

Breakfast and dinner: *farinha* and rice. Today Victorino went fishing below the falls; but the fish merely approached the hook and then darted away. Fortunately Candido killed today a *mutum*, which served for a dinner for ten men, and one *barrigudo* monkey, which will serve for our breakfast tomorrow. I only pray God that he will give me health to continue the voyage. There is not a single man that has not been sick; and we continue on without knowing where we are going. I wonder if we shall ever reach the *Madeira*.

April 15. Fortunately tomorrow we shall finish the boat. There remains only the work of transporting it below the fall and of making five oars. I think that on the 17th we shall set out. Today one more on the sick list: the old master workman, Terto, who, although he is sixty-two years old, is worth more than many young men. Victorino is worse and also Manguary. My God, what a situation this is! To see the men sick without resources! Day by day I pray God that I may get to the *Madeira* as soon as possible, in order to go on home and leave forever this life of the "Wandering Jew." I have experienced everything and can now form a true idea of this wilderness life. Only one who finds himself in my position is able to calculate the enormous difficulties that are constantly arising and that have to be overcome, under the penalty of losing one's life.

April 16. The men continue ill, while the boat will only be ready tomorrow. Victorino and Manguary are better. God grant that they may all be well tomorrow so that we may transport the canoes. Today João and Candido went hunting and succeeded better than yesterday, for they brought in a pig. They found a great Brazil-nut grove but not a single nut. There were heaps of hulls under every tree, a proof that our kinsfolk [i. e. Indians] were the despoilers. When we found the *tocarys*, we were more contented, because that is good food.

REDUCING THE BAGGAGE

April 17. The boat was made ready. It is as infirm as the master workman Terto. Indeed, what shall we do? We have to accept things as they are and not as they ought to be. I shall have to reduce the baggage. With the data I have, I have just calculated how long it will take us to get to the *Madeira*. It will take, if we are fortunate, one month. I have been eager to get there by the 22nd of May. We shall see. I shall consider myself very fortunate if I succeed. Thus I shall be able to get to *Manãos* before the 10th of June. On the 3rd of July, God willing, I shall dine with my people. As it is the birthday of my brother Edward, it will be a great day, for, if Caio comes, we shall have a family reunion. My stomach trouble is worse. I haven't been well all day, and that itch has troubled me a great deal.

April 18. We have been nine days at these falls without the possibility of going on with the voyage. In the first boat wreck we lost the kitchen utensils and other small articles, saving the boat. In the second we lost one boat and four oars. Fortunately I think today is the last day that we stay in this camp, for the men are better and this morning are transporting the canoes while Master Terto is making oars. We are going to reduce our baggage considerably at this point, first abandoning the awning, which occupies space and weighs a great deal. Of our supplies only a little remains. We only have *farinha* enough to last till we find other resources. Coffee we have in abundance. We shall abandon sixteen kilogram cans. Of rice we have four cans, which will last for eighteen meals, and seven kilos of sugar. This is what we have for our voyage.

THE PLAGUE OF INSECTS

If we find more falls like this one, we shall be unlucky, and, in that case, it will take us longer to get to the Madeira. I do not know, O God, how we shall get there. I am not well and, besides being weak and unable to walk, tire very easily. I have spent these days under my mosquito net, owing to the attacks of those terrible *borrachudo* gnats. The men go with their feet all wrapped up in rags and their heads covered with a cloth through which you see only the eyes.

This is a horrible thing. From our first camp to this one we have been persecuted by a thousand varieties of mosquitoes, *carapanás*, *motucas*, *carapatos* (ticks), *cupíns* (poisonous ants), *mucuins*, bees, ants, etc. What a terrible plague! We nearly finished the transportation of the canoes. Only the *Minas Geraes* robbed me today of much time. I shall see if tomorrow by midday I can transport the baggage to the landing place where the canoes are and if Master Terto will give me two more oars by that time for the trip. I desire to be well rid of this waterfall, and of its hoarse roar. Today is Sunday.

LOSS OF BOATS

April 20. I thought I would move the camp yesterday and go on with the voyage. The baggage was already transported, my awning reduced to half, and indeed everything was ready. I only waited for the two boats to be taken over a small part of the falls, and receive the baggage. The two boats, lashed together, were being towed with a rope; but, behold, water was getting into the small one through a punctured place, and the force of the current, which was very great, would not allow the men to pull it to shore with the rope. The moment was a critical one. The rope broke and the boats, together, were swept over the falls.

The men were saved, but the boats got between the stones, and, although we made desperate efforts to save them, all was in vain. Soon afterward we began to make a raft of *burityts*, but this morning we saw it would not

do. Then Master Terto went with the three men to find a cashew for another boat. Up to 8 o'clock at night the man has not returned, as it was agreed he should, to inform me that a tree had been found. Evidently they have walked the woods all day without success. God knows they may have to spend tomorrow without success. It would seem impossible for me to have lost three boats at one waterfall. My situation is a very serious one, and it becomes necessary to act with calm and do nothing with precipitation, under penalty of a grave disaster. What will become of us?

IMPATIENCE AT DELAY

April 21. What a horrible situation mine is! To desire, to be under imperious necessity to get on down the river as fast as possible, both on account of our health and on account of the scarcity of the supplies, and not to be able to do so for lack of boats, is a most distressing situation, and to endure it one must have great courage.

Not a single moment passes that I do not think of our condition. I wake up from sleep frequently, always thinking about the same thing. I make a thousand suppositions, at times absurd ones; but, thank God, I do not lose courage. Let us wait for the messenger that Master Terto was to send, and we shall then know what is to be done.—10 P. M. Laurindo came a short while ago to inform me that they had found a cashew 15 palms (10 feet) in circumference, sufficient to make a very large boat. Near this one there are others, 12 palms around. The baggage has already been transported to a place opposite the cashew tree. *Farinha* is the only provision we have. If we have no more delays at falls and if we are lucky with our health, I think we shall not get to the Madeira before the end of May or the beginning of June.

I imagine how my mother and brothers must be distressed at not receiving any news from me in May. What could I do? No one is in a greater hurry than I to get to Manáos, for I fear my health will get worse. I shall put forth every effort and hope God will grant me success.

A NEW BOAT BUILT, LOST, AND RECOVERED

April 24. We moved camp on the 22nd. On the 21st Master Tertuliano, with the men, cut down six cashews and found them all hollow. Happily on the morning of the 22nd, they found one, 16½ palms in circumference, that was sound. The canoe is nearly ready and is 35 palms long and 4 palms wide. The men are in a pitiful state. Our food is *farinha* with *patauá*. I have three hunters, and at times they bring in only a *jacú-tinga* or an *urú*, as today. Sometimes I feed on *farinha* and coffee till the afternoon. My God, what a horrible life! Besides this, the men are weak, covered with sores, and sick. Only God knows how I am. I fear some complication of the bowels.

April 25. The men took courage today from a visit of *barrigudos* to the place where the boat lies. Five of these monkeys were killed on this occasion by João, Aristoteles, and Bernardino. This means we shall have meat for breakfast on the 27th. Today a passing incident took place that gave us some concern. In the morning I sent Candido, João, and Aristoteles (Laurindo) hunting below our camp. The other men having passed the night here, I went with them early to the place where the boat is being made. On arriving there we discover the *barrigudos*, and Bernardino, after seven shots, brings one down. The hunters immediately supposed we were shooting the monkeys and came in the direction of our shots, leaving Candido with their boat. As his *camaradas* delayed in returning, he too came over to us, leaving the boat tied. An hour after he returned and found the boat had disappeared. It had gone down the river. At this point Aristoteles and João came and gave me notice of the incident. God knows how I felt.

Was it possible I should have to delay here longer to build another boat? I did not rest till, an hour later, they brought me the lost boat. What moments one passes in this kind of life!

NUMEROUS SHOALS AND FALLS

April 30. On the 27th I camped in the "Port of the Large Boat." The boat was got ready on the 28th; it carried all of us and all the baggage. On the 29th we set out at 3 o'clock. After traveling forty minutes, we had passed three shoals and had seen two others and one fall below us. On the 30th, after transporting the canoes, we carried the baggage to a place below the fall. This work was ended by 4 o'clock, and soon afterward it began to rain hard.

May 1. 9 A. M. Camp No. 28. I went out at 7:30. After rowing half an hour we heard the roaring of a waterfall and, for precaution, I sent a man ahead to look it over. This was at 8 o'clock, and before 9 I had learned of the existence of two falls, making it impossible to navigate here. We tied up on the left bank, where there is a little open field easy of access. We carried the baggage there and set up the camp on a beach just below the second fall, which is $1\frac{1}{2}$ to 2 meters high. The river is broad, and the spot is very pretty. We expected to continue the trip, but it was impossible. The men fortunately succeeded in landing the canoes above the second fall, and tomorrow we shall undertake to move them overland. It seems almost incredible that since April 10 we have not traveled two hours a day. We have shoals, rapids, and now falls, in quick succession. When shall we end this interminable struggle? I wonder if we shall find more falls after these two.

May 2. Not till afternoon did we succeed, with much labor, in transporting the two boats around the falls. We hope to set out early, to see

if, perchance, we may travel one or two hours. I suspect we are about to come to a high fall, for there have been no fish. When will that joyful day come when we shall have ended this horrid trip?

May 3. We began our activity at 4 o'clock in the morning and at 5:30 we began the voyage. All were hopeful of not meeting any more falls (the land being flat) for the rest of the day. But lo! at 8 o'clock we were halting in order to explore the river ahead of us, for we heard the roar of rapids and falls. At 9 o'clock I was informed that the men had walked more than a kilometer along a succession of falls and cataracts.

TRANSPORTING BAGGAGE AND BOATS AROUND FALLS

We then went into a side arm of the river and unloaded the boats. Not satisfied, I sent João to explore the river, while the men transported the baggage below. At 12:30 the men returned, and João also at 1 o'clock. He told me that the whole region was full of falls; that there was a great fall, 10 meters high, farther down; and that he heard the roar of still other falls below. At 4 o'clock the baggage was in our Camp No. 29, and the men had found, lower down, an *igarapé* 10 meters broad. What shall we do with our boats? Shall we make others and leave these? We will decide tomorrow. Today Candido and João killed thirteen *jacú-tingas*.

May 4. Camp No. 30. We moved to this camping place just below the great fall and on the left bank of the river. Our blazed path runs along the river, and one may see now and then picturesque and most beautiful spots. I have not seen the great fall yet, because, when I got here, my legs had about given out and were aching. João went as far as the last shallows, nearly a kilometer from here. From there, after examining everything, he went on down the river, which improves; for no more noise of falls is heard, and the water runs slowly. Tomorrow we shall begin the transportation of the boats through the falls. I expect I shall lose them, for the passes are very difficult, and there are sections over which they cannot be carried on land because of the rocks and the nature of the ground. God only knows when we shall get away from this place. I judge that these last breaks are spurs of the Serra do Norte; if so, the river will grow better, and we shall finish our painful voyage in a little while.

DISCOURAGEMENT IN THE CAMP

May 5. We took the boats as far as Camp No. 29 near the first fall; we expect to carry them by land tomorrow, and, as there is a great deal to be done, we may stay here several days. Food is scarce, and the men have become discouraged, for we had not found a single *pataúá* nor a Brazil nut. Today, however, Candido, João, and Manguary found an abundance—enough to take their breath away.

Today at 12:30 Master Terto came to the camp in discouragement with a cowardly suggestion that we abandon the boats and make new ones of

cashew or chestnut. I had less than my usual patience, for the adversities of this exploring life are extreme. I told him to go back and transport the boats even though it should take fifteen days, as he thought it would, to put them below the great fall. I continue ill; my abdomen is terribly swollen, hard, and sore; my legs are weak, and there is a kind of numbness in my whole body.

How many efforts I have made to hasten my trip! And all nearly in vain. One has to have great resignation and much courage not to give up.

SHOOTING THE BOAT OVER THE FALL

May 6. Early today the men went on ahead with my orders to begin the transportation of the boats, to have a good start by the time I arrived. I ate some nuts and *farinha*, had coffee, and went after them. On arriving at the fall near Camp No. 29 to my amazement I saw that Manguary in the prow of the large boat was descending the little fall. A little afterward he dashed over and, still in the prow of the boat, ran aground just above the great fall. Phlegmatically he stood looking over the big fall with the indifference of one who might simply calculate its height and say to the river, "Now come on, float the boat, and take it down the tumble." After fifteen minutes it dashes over, sinking and breaking—the rope at the prow was secure to the right bank of the channel. When it submerged he loosened the rope, let the boat go farther down, and tied it. Then he leaps into the full current, dives, and succeeds in descending with the boat till the rope is very taut. A half-hour afterward we were bailing out the boat on the left bank, where I and the men were standing. Afterward he and Aristoteles said to me they were going to descend the other fall of the channel in order to be just above the second cataract. I considered it foolish but, as they assured me there was no danger, I yielded.

At 3:30 the boat was on the right bank, run aground, near the entrance of the second cataract. The two went across the river, and tomorrow we hope to be favored again by this breeze that blows good fortune. Perhaps tomorrow the boats will be below the last and greatest of the cataracts. I shall give thanks to God if we are successful in this last crossing, for I am anxious to go ahead and I continue ill. My legs are worse; I am not able to walk fifty meters without getting tired. If I go ahead, it is by holding on to bushes and limbs of trees. When shall I be with my people? Oh, how much have I thought about them! and how many air castles have I built! This is the last time I will leave my family and throw myself into risky undertakings like this.

Fever made me today one of its "rare" visits but did not leave me prostrated as formerly. In the morning I went out with the men to draw out the big boat that had been submerged among the rocks of a little cataract. I felt ill and returned to the camp a little while afterward discouraged from seeing that it was difficult to get the boat out and that a delay might be necessary.

At 10 o'clock Manguary arrived and informed me that, after a great struggle, they had hauled down the boat that was at the falls just above our camp. I was very much gratified. At 3 o'clock it was below the landing at the side of the other. Tomorrow we shall make some oars, for we have only three. Today we had no game; what came to our aid was the nuts and the *patauá*.

REFLECTIONS

Only one like myself, isolated and alone in the world, without a single friend to whom to confide what I feel, can fully understand this page of intimacies. I am entirely cut off from everything, my supplies are scarce, and I am ill, constantly suffering, and facing ever-increasing difficulties. Indeed, obstacles rise up at every step, impeding the continuation of this afflicting voyage. And to think we have not made half the distance yet. Oh, how sad is our situation and especially mine! One who, like myself, behind an apparent indifference, idolizes his family and friends, cannot, in this wilderness of the Brazilian west, keep from shedding some tears—tears of homesickness, tears apprehensive of the health and happiness of his own. Who is it that would not, like me, shed such tears? And furthermore, who is there that would not think of the most intimate facts of his home? Constantly I imagine myself there. Today, for instance, is Sunday, the day of rest. In the morning I seem to see my mother and the girls getting ready for mass and Edward and Henry going to the bath; after mass the customary chat at the front door. Indeed it would be irksome to enumerate everything.

Breakfast, the luncheon, the afternoon dinner—all these scenes pass before my eyes as if I were seeing motion pictures.

And . . . even Dr. Angelino awaiting Monsenhór Marinho. These are the scenes that contribute to make my eyes shed tears, which glide burning, one after another, down my face.

What I have said does not denote a weakness of soul; it is not fear. Though sick, and the sickest of all the party, I am the most cheerful and from time to time speak words of enthusiasm to the men or make a joke that disciplines somebody, and I always seek to encourage them to go on with the journey.

CLEARINGS AND VESTIGES OF INDIANS

May 9. Owing to the lack of oars we did not leave today. Candido, while hunting today, came up with eight clearings on the left bank of the *igarapé* near its headwaters. Two large ones were in the center, and the others around them. They were made by brute force and only last year. We have also found old vestiges of Indians, and I am glad of this. I pray God I may not even see them.

May 10. Camp No. 31. Although fever visited me early today, we began the work of transporting the baggage from the boats. We went out

at 4:30, and at 5:00 we passed on an island the last shoals in this long section full of falls. Tomorrow we shall transport the baggage and the boats. I wonder if we shall travel a whole day without meeting any falls?

May 11. We traveled today without interruption from 7 o'clock to 10, when we twice had to transship our cargo. At 5 P. M. we set out from the last shoal (second transshipment), and at 5:15 we stopped above another to begin our perpetual struggle again in the morning. Today we have made the greatest distance since April 9; we have gone 20 kilometers. We have had a (successful) hunt, thank God! Today we got two little *piaus* and a big fish Assuredly there are great falls below, which prevent the fish from coming up the river. In this camp there is a drinking place which attracts deer and tapir such as I did not suspect existed. It must be visited by many of these beasts. One hundred meters in the interior João encountered eight Indian huts made the past year. Of them all only one was made of the *assahy* leaf, the others of the *pacoba* leaf. At the thirtieth position that we fixed we encountered old remains of our kinsfolk [i. e. Indians] and among them a tree of 40 centimeters diameter which they had cut down with a stone ax for gathering honey.

FREQUENT RAPIDS AND TRANSSHIPMENTS

May 12. Camp No. 33. At 7 o'clock we transported cargo by land and set out. Passed six shoals and a little rapid with a fall of $5\frac{1}{2}$ meters. Transshipped four times; at 4 P. M. passed a shoal and immediately saw another large one, but a channel gave us passage. Thus we avoided it, although the passage was difficult. After the crossing a heavy shower fell, and, as it was very dark and the river was full of stones, we landed all wet. We finished our meal at 8:30. Today we killed only a *bigua*!

May 13. Set out at 6:30 and at 6:15[?] landed below a great pool where the river has a width of 200-250 meters. Passed by sixteen shoals and two falls, the first 1.50 meters high, the second 0.6 meter. Transported the cargo twice, the second time at 4:30, at which hour we breakfasted. Calculated distance traveled about 24 kilometers.

May 14. Set out at 6:30; at 7:15 first rapid; carried cargo over land. When the big boat was about loaded we heard João shouting for us to catch the canoe he had lost in the rapids. At that instant I saw it pass, prow up in the air. Immediately Manguary, Terto, Bahia, Bernardino, and Aristoteles were out to the rescue, rowing the big boat. What an hour I passed! I thanked God when they turned up bringing with them the runaway.

THE FIRST AFFLUENT OF THE ANANÁZ

We set out at 9:30, and at 11:30, below a great shoal on the right bank, we had the surprise so greatly hoped for; we saw the first river emptying into the Ananá, about 25 meters wide more or less. Directly below, we

breakfasted on an island and delayed in order to stretch the tents and dry the wet supplies.

At 1:15 I went out, and at 3:20 we stopped to transport the baggage at some shoals. At 4:30 we set out and at 5:00, after hearing a roar of a fall, we landed and passed the night in our Camp No. 35. I sent men by land to explore and learned of the existence of three falls and large shoals. We shall see tomorrow what we can do. Today we saw new signs of kinsfolk.

May 15. Camp No. 36. Soon after daybreak we began to work. We went down half a kilometer and tied up to the left bank, transporting the baggage soon after. The land is very irregular and dangerous. We easily transported the baggage through the marginal channels. The first, though only half a meter deep, was the most dangerous, and the last, which was near 1.30 meters deep, was better. At 12:30, having breakfasted, we set out, thanking God we had passed this section, so full of falls, without trouble. At 1:30 we came upon another fall. After we had carried the baggage along the bank, the boat easily descended the stream, and at 3 o'clock we set out.

LIVING ON A DIET OF NUTS

As we had nothing for dinner, at 3:50 we stopped in a small nut grove, and, although we made thorough search, we gathered only half a sack of nuts, of which two-thirds were spoiled. At 4:30 we left and soon stopped in a large nut grove, where we supplied ourselves with nuts for dinner. We put up just opposite a good clearing, and now at 8 o'clock the men are all busy wrestling with a dinner. Raw nuts, baked nuts, stewed nuts, grated nuts, nut porridge, and nut milk—indeed today it is nuts in every style. There is no sign of bait for fishing. My dinner consists of a *farofa* of grated nuts, *farinha* roasted, and coffee. We have recently been little visited by the *borrachudo* gnats; but the purple butterflies and, at night, the ants and *cupíns* will not leave us. The plague always! . . .

May 16. Camp No. 37. This endless series of falls continues still. We transported the baggage and passed around three falls, the two highest reaching a height of 2 to $2\frac{1}{2}$ meters. We have passed two other falls and five shoals. We hardly get away from one before we hear the roar of another. Today we put up just below a cataract $2\frac{1}{2}$ meters high on a side stream. The large boat remains to be taken over tomorrow. We did not have time today.

We are feeding on *farinha* and nuts, and this fare has done me much harm. I have tightened my belt a great deal. We killed nothing today.

THE FALLS BECOME MORE DIFFICULT

May 17. Camp No. 38. Not until midday did we leave Camp No. 37 after we had taken the large boat over a little side fall. We traveled only

30 minutes. After this little voyage, in which we passed two shoals, we were obliged to halt again just above a great fall, more than 8 meters high. We examined the land and verified the impossibility of transporting the boats either by land or by water, for the land also is very irregular. It is a mountain range, which the river cuts through, the banks being 10.35 meters high. Only by the help of God shall we be able to save our boats. The small one with great risk and difficulty may pass through the falls of a side stream, but the large one will not. So we have decided to let it go tomorrow over the great fall, there being a probability of saving it if it does not break in falling. If it does not break it should stop in a large pool where Manguary and Aristoteles will stand to catch it and float it to the right bank.

Our situation is precarious, for we have had no game nor fish for three days, and our *farinha* is reduced to a small quantity. Tonight Victorino went fishing and caught nothing. Brazil nuts are our principal food, although we are already suffering from having eaten them. I have grown worse, for my bowels are very sore and badly swollen. We are compelled to resign ourselves to staying here eight or ten days more! I can imagine how mother and the girls are looking for me in May! Not till June or July shall I be able to get to Manáos, but . . . God is great and is able to be moved to pity by our situation.

May 18. Here at Camp No. 38 we shall remain a good while longer. All hope of saving our canoes has gone. Our last one was soon full of water and was caught between two rocks and cannot be extricated. The small one remained above the fall; it absolutely will not pass. We shall begin to make new ones today. The worst is that we have nothing to eat. Still God is great and will not forsake us. Victorino succeeded in catching seven fish, and the five men who went hunting brought in two birds. Master Terto did not find cashew trees for the boats. Tomorrow we shall avail ourselves of our last resort, which is to save at least the small boat.

May 19. In spite of the rain we started early on the task of transporting the small boat. The ground is very hilly, and it was very difficult to drag the boat on land, for the rope was rotten and broke three times. We had to give up this rope and use a roll of American line, which, being too small, we doubled four times. Fortunately, with much effort, by 3 o'clock we had the boat out of danger in our camp.

SAFE PASSAGE OF THE BOATS

At 3.30 we made an effort to save the large boat, which the men had thought lost. Thank God, by 5 o'clock we had succeeded in getting it out of the water and drawing it on land at an island. Maybe we can save it. How everything changes from one moment to another!

We judged the small boat was lost; but I inspired the men with enthusiasm, and, behold, it was saved. Now what we lack is food, for we

have not had any game. Even the nuts gave out today at dinner. I only pray God for help, so we may set out tomorrow and find something on the way, for we have nothing.

May 20. Thank God, by 10 o'clock we had rescued the large boat, but it almost cost us the life of a companion.

After passing the flagstones, Manguary, Aristoteles, and Laurindo, with wonderful skill, got into her, and the boat, carried forward by the great force of the water in a narrow channel in shape of an S, descended with almost incredible rapidity, hardly obeying the oars. João and Victorino stood on the bank to catch the ropes when thrown and to pull her toward still water. Unfortunately they were not able to haul her landward, and the boat, impelled by the force of the water, dragged the two men along and dashed against the rocks at the point of the island, splitting her prow and throwing Manguary into the water. For a moment he was out of sight, but Laurindo, with great agility, was immediately on the rocks and, rope in hand, was soon helping Manguary up. Then they hauled the boat back into the channel, but the strength of the current forced the rope out of their hands, and the boat rushed down the river to a pool where the men, by swimming, caught her again.

At 4:30 we set out and before 5 o'clock we had crossed seven shoals. We were then obliged to stop and wait until the next morning in order to transport our baggage across the island. *Farinha* and a few nuts are all the food in our possession. Neither game nor fish could we find.

FALL AFTER FALL AND SHOAL AFTER SHOAL

May 21. At 6 A. M. we were up and ready to start with our baggage across an island just below our encampment. Fall after fall and six more shoals still appeared in our way, and, at almost every one, we were obliged to stop as before and examine the channels. At 2:40 in the afternoon we heard very distinctly the roar of a large fall and by 3 o'clock we were unloading our baggage at a spot 50 meters above it.

I was charmed with the beautiful spectacle before me. The river leaps from a high point, falling in a single stream a distance of 8 meters. There another fall is formed, having a considerable slope and only 4 meters high. Is it possible that we shall encounter more impediments and be prevented from continuing our trip?

During the whole of today we have traveled only one hour and twenty minutes and . . . we thank God for that! At last we were fortunate enough to catch our first *piranhas* (a kind of fish). Victorino has succeeded in getting us six of them, and they are nice and large. Candido and João have given us one *cojubim* and three *barrigudo* monkeys. I wonder how we shall come out!

May 22. We have done little today. Still we have transported the small boat over the flagstones at the big fall, and tomorrow I shall explore

the river below our camp. Is it possible we shall still find great falls? It would seem incredible! We are now at the end of May and very far yet from any supplies.

After all, let us endure with patience and resignation, since this is our lot, and we shall work with pertinacity to fulfill our mission. How distressed must my family be for news from me!

FRESH SIGNS OF INDIANS

May 23. After some effort we succeeded in transporting the boat, by land and by water, to our landing place by 3:30 in the afternoon. To get it over the flagstones at the big fall we had to make a kind of bridge. Tomorrow I hope to get the large one over and, God willing, we shall leave in the afternoon. This afternoon I sent Candido and Victorino in the boat to the other side of the river to hunt for nuts. An hour afterward they returned saying they had seen new signs of Indians there: a wigwam of wild banana leaves, badly made and showing that the leaves had been torn from the trees by main force; three great heaps of broken nuts; and three other old wigwams, one burnt. These Indians come from the region beyond, as the road indicates; and it is clear they are not acquainted with our implements.

FORTUNATE PASSAGE OF THE BOAT

May 24. From early in the morning we have been working to transport the large boat. By a tremendous effort we succeeded in dragging it to the bridge we made to unite the two flagstones at the fall. Just there it tumbled and landed below with the stern split. I have just left the men to cast it into the water. Very likely it will catch on some stone, and, in this case, we shall have to make another. We have done all we could to rescue it (12 o'clock). Our fare continues to be insufficient to sustain us. I am all gone with hunger. However, this is life; and I must be resigned to it.

By wonderful good luck we forced the large boat just below the great fall, and a few minutes afterward, as if guided by a human hand, it went straight to the channel of the second fall below. Taking the channel it descended and passed out of sight, to come to view again 300 meters away. There Laurindo and Manguary, jumping into the water, caught it just below our camp.

May 25. We set out at 5 A. M., and during the entire day we have not traveled ten minutes without having to stop to pass sometimes falls and sometimes shoals. Four times we transported the baggage by land and in the evening encamped on a little beach just above large shoals.

Our breakfast and our dinner consisted of a cup of *farinha*. There is not even a bird for bait. In the afternoon we passed an Indian footbridge. The Indians are near us, for we have seen signs of them recently.

TRIPLE FALLS AT LAST

May 26. We set out at 6 o'clock in the morning from Camp No. 41 and stopped in still waters near a lake where there are many fish. I sent Candido, Latrindo, and João to hunt and also to look for some nuts, for we have been out of these for a long time. Victorino and Bernardino went to explore the river below, for it gets much narrower and runs rapidly. Thank God, we have passed successfully the falls and the shoals. The men I sent to hunt did not bring back anything except a few nuts, and on these we made our breakfast. Just below our Camp No. 42 there are no less than three falls! It really seems a joke! I have not seen them yet, since my eruption will not permit walking; but I trust in God that we shall go on with our voyage and save the boats. What a horrible thing is this river!

We did not travel today more than ten minutes. At this rate when shall we get to the Madeira?

May 27. Camp No. 43. We are in camp below the last fall. The middle one is 2 meters high and the other two are about $1\frac{1}{2}$ each. The passage of the last two is very dangerous, but I have faith in God that nothing will happen to us. The place here is like that behind us, very mountainous, but farther down it is level. The woods are better, and hills do not appear ahead. I am glad to say we had fish for breakfast, and for dinner the men ate a monkey. I only ate a little rice (from a can I had reserved for the sick) with nuts, for I was feeling very ill.

ANOTHER DISASTER

May 28. We went this morning to transport the boats. The large boat on entering a channel at the first fall, owing to the current, got under way and, the men being forced to cast off the rope, ran down and stopped in still water between the second and third falls.

This smashed the prow, the bench in the middle broke, and the bottom split so as to leak slightly. The small boat, which was in still water above the second fall, also broke the rope that held it and was seen only once afterward. We lost the "*F*—————" —the veteran of the Ananáz—which with me the first days of the exploration in an Indian port. This occurred at 10 A. M. At 2 o'clock in the afternoon we had a fine cashew cut down to make another. Nevertheless, God is great and will not forsake us. This means four more days lost!

The diary terminates here. Recalling the hardships of one of de Souza's men who, after the Indian attack, journeyed alone for forty-six days more downstream, it seems probable that de Souza himself would have proved too ill and weak to stand the long voyage. His work must be regarded as an heroic pioneer endeavor. Until a first voyage, with all its hazards, had

outlined the main course of the stream, the nature of the country, and the character of the work itself, adequate equipment for the dangerous trip could not be provided.

Like the Madeira and the Rio Theodoro, the Ananáz cuts athwart the old mountain axes that extend into the low Amazon country from the Brazilian uplands. It is at such places that the broken relief and the falls are encountered. The fuller history of these extremely interesting topographic relics will be one of the objects of later exploration.

Both Colonel Roosevelt and Colonel Rondon were recipients of the Livingstone Centenary Gold Medal of this Society and both took occasion to speak in the warmest terms of the work and sacrifice of Lieutenant de Souza.